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Application Number	09/993,388
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First Named Inventor	Mark M. Wang
Group Art Unit	1743
Examiner Name	Not Yet Assigned
Attorney Docket Number	267/006

U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
[Handwritten initials]	AA	US 3558877	01/26/1971	Pressman	
	AB	US 3628182	12/14/1971	Ashkin et al	
	AC	US 3638139	01/25/1972	Ashkin et al	
	AD	US 3662183	05/09/1972	Askin et al	
	AE	US 3710279	01/09/1973	Ashkin	
	AF	US 3725810	04/03/1973	Ashkin et al	
	AG	US 3761721	09/25/1973	Altshuler et al	
	AH	US 3778612	12/11/1973	Ashkin	
	AI	US 3793541	02/19/1974	Ashkin et al	
	AJ	US 3808432	04/30/1974	Ashkin	
	AK	US 3808550	04/30/1974	Ashkin	
	AL	US 4063106	12/13/1977	Ashkin et al	
	AM	US 4092535	05/30/1978	Ashkin et al	
	AN	US 4127329	11/28/1978	Chang et al	
	AO	US 4247815	01/27/1981	Larson et al	
	AP	US 4327288	04/27/1982	Ashkin et al	
	AQ	US 4390403	06/28/1983	Batchelder	
	AR	US 4440638	04/03/1984	Judy et al	
	AS	US 4451412	05/29/1984	Loiseaux et al	
	AT	US 4453805	06/12/1984	Ashkin et al	
	AU	US 4520484	05/28/1985	Huignard et al	
	AV	US 4536657	08/20/1985	Bruel	
	AW	US 4627689	12/09/1986	Asher	
	AX	US 4632517	12/30/1986	Asher	
	AY	US 4827125	05/02/1989	Goldstein	
	AZ	US 4887721	12/19/1989	Martin et al	
	BA	US 4893886	01/16/1990	Ashkin	
	BB	US 4908112	03/13/1990	Pace	
	BC	US 5029791	07/09/1991	Ceccon et al	
	BD	US 5079169	01/07/1992	Chu et al	
	BE	US 5100627	03/31/1992	Buican et al	
	BF	US 5113286	05/12/1992	Morrison	
	BG	US 5121400	06/09/1992	Verdiell et al	
	BH	US 5170890	12/15/1992	Wilson et al	
	BI	US 5189294	02/23/1993	Jackson et al	
	BJ	US 5198369	03/30/1993	Itoh et al	
	BK	US 5206504	04/27/1993	Sridharan	
	BL	US 5212382	05/18/1993	Sasaki et al	
	BM	US 5245466	09/14/1993	Burns et al	
	BN	US 5274231	12/28/1993	Chu et al	
	BO	US 5283417	02/01/1994	Misawa et al	
	BP	US 5308976	05/03/1994	Misawa et al	

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U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	BQ	US 5327515	07/05/1994	Anderson et al	
	BR	US 5337324	08/09/1994	Ohtsu et al	
	BS	US 5338930	08/16/1994	Chu et al	
	BT	US 5343038	08/30/1994	Nishiwaki et al	
	BU	US 5355252	10/11/1994	Haraguchi	
	BV	US 5360764	11/01/1994	Celotta et al	
	BW	US 5363190	11/08/1994	Inaba et al	
	BX	US 5364744	11/15/1994	Buican et al	
	BY	US 5374566	12/20/1994	Iranmanesh	
	BZ	US 5445011	08/29/1995	Ghislain et al	
	CA	US 5452123	09/19/1995	Asher et al	
	CB	US 5473471	12/05/1995	Yamagata et al	
	CC	US 5495105	02/27/1996	Nishimura et al	
	CD	US 5512745	04/30/1996	Finer et al	
	CE	US 5608519	03/04/1997	Gourley et al	
	CF	US 5620857	04/15/1997	Weetall et al	
	CG	US 5625484	04/29/1997	Coutsomitrans	
	CH	US 5629802	05/13/1997	Clark	
	CI	US 5631141	05/20/1997	Sonek et al	
	CJ	US 5637458	06/10/1997	Frankel et al	
	CK	US 5644588	07/01/1997	Misawa	
	CL	US 5653859	08/05/1997	Parton et al	
	CM	US 5659561	08/19/1997	Torruellas et al	
	CN	US 5689109	11/18/1997	Schutze	
	CO	US 5694216	12/02/1997	Riza	
	CP	US 5760395	06/02/1998	Johnstone	
	CQ	US 5770856	06/23/1998	Fillardes et al	
	CR	US 5776674	07/07/1998	Ulmer	
	CS	US 5793485	08/11/1998	Gourley	
	CT	US 5795457	08/18/1998	Pethig et al	
	CT1	US5804436	09/08/1998	Okun et al	
	CU	US 5814200	09/29/1998	Pethig et al	
	CV	US 5858192	01/12/1999	Becker et al	
	CW	US 5888370	03/30/1999	Becker et al	
	CX	US 5900160	05/04/1999	Whitesides et al	
	CX1	US5919646	07/06/1999	Okun et al	
	CY	US 5935507	08/10/1999	Morito et al	
	CZ	US 5939716	08/17/1999	Neal	
	DA	US 5952651	09/14/1999	Morito et al	
	DB	US 5953166	09/14/1999	Shikano et al	
	DC	US 5956106	09/21/1999	Petersen et al	
	DD	US 5993630	11/30/1999	Becker et al	
	DE	US 5993631	11/30/1999	Parton et al	
	DF	US 5993632	11/30/1999	Becker et al	
	DG	US 6015714	01/18/2000	Baldarelli et al	
	DH	US 6033546	03/07/2000	Ramsey	
	DI	US 6055106	04/25/2000	Grier et al	
	DJ	US 6067859	05/30/2000	Kas et al	
	DK	US 6071394	06/06/2000	Cheng et al	
	DL	US 6078681	06/20/2000	Silver	
	DM	US 6082205	07/04/2000	Zborowski et al	
	DN	US 6088097	07/11/2000	Uhl	
	DO	US 6088376	07/11/2000	O'Brien et al	

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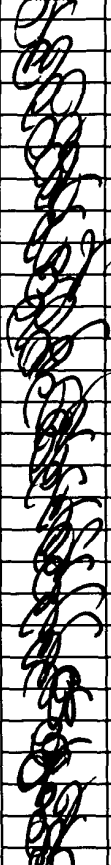
Sheet 3 of 8

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	DO1	US6096509	08/01/2000	Okun et al	
	DP	US 6111398	08/29/2000	Graham	
	DQ	US 6121603	09/19/2000	Hang et al	
	DR	US 6139831	10/31/2000	Shivashankar et al	
	DS	US 6142025	11/07/2000	Zborowski et al	
	DT	US 6143558	11/07/2000	Kopelman et al	
	DU	US 6197176	03/06/2001	Pethig et al	
	DV	US 6208815	03/27/2001	Seidel et al	
	DW	US 6215134	04/10/2001	O'Brien et al	
	DX	US 6287776	09/11/2001	Hefti	
	DY	US 6287832	09/11/2001	Becker et al	
	DZ	US 6287874	09/11/2001	Hefti	
	EA	US 6294063	09/25/2001	Becker et al	

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FOREIGN PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ² - Number ³ - Kind Code ⁴ (if known)				
	EB	WO 94/08221	04/14/1994	Warburton		
	EC	WO 97/21832	06/19/1997	Eigen et al		
	ED	WO 99/39190	08/05/1999	Hefti		
	EE	WO 99/61888	12/02/1999	Quake et al		
	EF	WO 00/23825	04/27/2000	Renn et al		
	EG	WO 00/45160	08/03/2000	Hefti		
	EH	WO 00/45170	08/03/2000	Hefti		
	EI	WO 00/45179	08/03/2000	Zuker et al		
	EJ	WO 00/54882	09/21/2000	Zhou et al		
	EK	WO 01/05514	01/25/2001	Lock et al		
	EL	WO 01/09606	02/08/2001	Hefti		
	EL1	WO 01/11333B1	09/27/2001	Ransom		
	EL2	WO 01/11333A3	02/15/2001	Becker		
	EM	WO 01/14870	03/01/2001	Becker et al		
	EN	WO 01/20329	03/22/2001	Hefti		
	EO	WO 01/32930	05/10/2001	Quake et al		
	EP	WO 01/40769	06/07/2001	Garbow		
	EQ	WO 01/44852	06/21/2001	Kirsch et al		
	ER	DE 4326181 A1	02/09/1995	Stelzer et al		
	ES	EP 0898493	01/19/2000	Pethig et al		
	ET	JP 3-101419	04/26/1991	Kudome et al		
	EU	JP 5-88107	04/09/1993	Ogasawara		
	EV	JP 5-232398	09/10/1993	Isaka		
	EW	JP 6-123886	05/06/1994	Higure et al		
	EX	JP 6-132000	05/13/1994	Haraguchi et al		
	EY	JP 8-234110	09/13/1996	Otaki et al		
	EZ	JP 10-48102	02/20/1998	Yasuda et al		
	FA	JP 10-62332	03/06/1998	Kano et al		
	FB	JP 11-218691	08/10/1999	Yasuda et al		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
FC	FC	ACKERSON et al, Radation Pressure As A Technique For Manipulating The Particle Order In Colloidal Suspensions, Faraday, Discuss.Chem.Soc., 83, 1987, pp 309-316	
FD	FD	AFZAL et al, Optical Tweezers Using A Diode Laser, Rev.Sci.Instrum., 63,4, 04/1992, pp 2157-2163	
FE	FE	AMATO, Optical Matter' Emerges Under Laser, Science News, 136, 1989, pp 212	
FF	FF	ASHER et al, Crystalline Colloidal Bragg Diffraction Devices: The Basis For A New Generation Of Raman Instrumentation, Spectroscopy, 1,12, 1986, pp. 26-31	
FG	FG	ASHKIN, Acceleration & Trapping Of Particles By Radiation Pressure, Physical Review Letters, 24,4, 01/26/1970, pp 156-159	
FH	FH	ASHKIN, Trapping Of Atoms By Resonance Radiation Pressure, Physical Review Letters, 40,12, 03/20/1978, pp 729-732	
FI	FI	ASHKIN, Applications Of Laser Radiation Pressure, Science, 210, 4474, 12/05/1980, pp 1081-1088	
FJ	FJ	ASHKIN, Forces Of A Single Beam Gradient Laser Trap On A Dielectric Sphere In The Ray Optics Regime, Biophys. J., 61, 02/1992, pp 569-582	
FK	FK	ASHKIN et al, Optical Levitation Of Liquid Drops By Radiation Pressure, Science, 187, 4181, 03/21/1975, pp 1073-1075	
FL	FL	ASHKIN et al, Observation Of A Single Beam Gradient Force Optical Trap For Dielectric Particles, Optics Letters, 11,5, 05/1986, pp 288-290	
FM	FM	ASHKIN et al, Optical Trapping & Manipulation Of Viruses & Bacteria , Science, 235, 4795, 03/20/87, pp 1517-1520	
FN	FN	ASHKIN et al, Optical Trapping & Manipulation Of Single Cells Using Infrared Laser Beams, Nature, 330, 6150, 12/24-31/1987, pp 769-771	
FO	FO	ASHKIN, Internal Cell Manipulation Using Laser Traps, PNAs USA, 86, 20, 10/1989, pp 7914-7918	
FP	FP	ASHKIN, Optical Levitation By Radiation Pressure, Appl.Phys.Lett., 19,8, 10/15/1971, pp 283-285	
FQ	FQ	ASHKIN, Optical Trapping & Manipulation Of Neutral Particles Using Lasers, PNAs USA, 94,10, 05/13/1997, pp 4853-4860	
FR	FR	AVIVA, Avia website printout, www.avivabio.com	
FS	FS	BAGNATO et al, Continuous Stopping & Trapping Of Neutral Atoms, Physical Review Letters, 58,21, 05/25/1987, pp 2194-2197	
FT	FT	BECKER et al, Separation Of Human Breast Cancer Cells From Blood By Differential Dielectric Affinity, PNAs USA, 92, 01/1995, pp 860-864	
FU	FU	BERNS et al, Use Of A Laser Induced Optical Force Trap To Study Chromosome Movement On The Mitotic Spindle, Proc.Natl.Acad.Sci.USA, 86,12, 06/1989, pp 4539-4543	
FV	FV	BERNS et al, Laser Microbeam As A Tool In Cell Biology, Intl Review of Cytology, 129, 1991, pp 1-44	
FW	FW	BIGELOW et al, Observation Of Channeling Of Atoms In The Three Dimensional Interference Pattern Of Optical Standing Waves, Physical Review Letters, 65,1, 07/02/1990, pp 29-32	
FX	FX	BLOCK et al, Compliance Of Bacterial Flagella Measurmnt Without Temperatures, Nature , 338, 04/06/1989, pp 514-518	
FY	FY	BLOCK, Optical Tweezers: A New Tool For Biophysics, Noninvasive Techniques In Cell Biology, chap 15, 1990, pp 375-402	
FZ	FZ	BRONKHORST et al, A New Method To Study Shape Recovery Of Red Blood Cells Using Multiple Optical Trapping, Biophys. J., 69,5, 11/1995, pp 1666-1673	

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	GA	BUICAN et al, Automated Single Cell Manipulation & Sorting By Light Trapping, Applied Optics, 26, 24, 12/15/1987, pp 5311-5316	
	GB	BURNS et al, Optical Binding, Physical Review Letters, 63,12, 09/18/1989, pp 1233-1236	
	GC	BURNS et al, Optical Matter: Crystallization & Binding In Intense Optical Fields, Science, 249, 4970, 08/17/1990, pp 749-754	
	GD	BUSINESS WEEK, Is There Anything A Laser Can't Do?, Business Week, 10/30/1989, pp 157	
	GE	BUSTAMANTE, Direct Observation & Manipulation Of Single DNA Molecules Using Fluorescence Microscopy, Annu.Rev.Biophys.Biophys.Chem., 20, 1991, pp 415-446	
	GF	BUSTAMANTE et al, Towards A Molecular Description Of Pulsed Field Gel Electrophoresis, TibTech, 11, 1993, pp 23-30	
	GG	BUSTAMANTE et al, Manipulation Of Single DNA Molecules & Measurement Of Their Persistence, Length & charge Density Under A Fluorescence Microscope, Abst of the 19th Ann Mtg Of Amer. Soc. For Photobiology, Photochem Photobiol, 53, 06/22/1991, pp 46S	
	GH	CHIOU et al, Interferometric Optical Tweezers, Optics Communications, 133, 01/01/1997, pp 7-10	
	GI	CHOU et al, A Microfabricated Device For Sizing & Sorting DNA Molecules, PNAs USA, 96, 01/1999, pp 11-13	
	GJ	CHOWDHURY et al, Laser Induced Freezing, Physical Review Letters, 55,8, 08/19/1985, pp 833-836	
	GK	CHOWDHURY et al, All Optical Logic Gates Using Colloids, Microwave & Optical Technology Letters, 1,5, 07/1988, pp 175-178	
	GL	CHOWDHURY et al, Exchange of Letters, Science, 252, 05/25/1991	
	GM	CHU et al, Experimental Observation Of Optically Trapped Atoms, Physical Review Letters, 57,3, 07/21/1986, pp 314-317	
	GN	CLARK et al, Single Colloidal Crystals, Nature, 281, 5726, 09/06/1979, pp 57-60	
	GO	CROCKER et al, Microscopic Measurement Of The Pair Interaction Potential Of Charge Stabilized Colloid, Physical Review Letters, 73,2, 07/11/1994, pp 352-355	
	GP	CROMIE, Scientists Bind Matter With Light, Harvard University Gazette, 10/13/1989, 1, pp 4-5	
	GQ	DUFRESNE et al, Optical Tweezer Arrays & Optical Substrates Created With Diffractive Optics, Review of Scientific Instruments, 69, 5, 05/1998, pp 1974-1977	
	GR	FALLMAN et al, Design For Fully Steerable Dual Trap Optical Tweezers, Applied Optics, 36,10, 04/01/1997, pp 2107-2113	
	GS	FISHER, The Light That Binds, Popular Science, 01/24/1990, pp 24-25	
	GT	FOURNIER et al, Writting Diffractive Structures By Optical Trapping, SPIE, 2406, 02/06-08/1995, pp 101-112	
	GU	FU et al, A Microfabricated Fluoresence Activated Cell Sorter, Nature Biotechnology, 17, 11/1999, pp 1109-1111	
	GV	GASCOYNE, Gascoyne website printout , 12/01/2000	
	GW	GORRE-TALINI et al, Sorting Of Brownian Particles By The Pulsed Application Of A Asymmetric Potential, Physical Review E, 56, 2, 08/00/1997, pp 2025-2034,	
	GX	GRIER, New Age Crystals, Nature, 389, 6653, 10/23/1997, pp 784-785	

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	GY	GREULICH et al, The Light Microscope On Its Way From An Analytical To A Preparative Tool, Jnl Of Microscopy, 167, Pt 2, 08/01/1992, pp 127-151	
	GZ	GURRIERI et al, Imaging Of Kinked Configurtons Of DNA Molecules Undergoing Orthogonal Field Alternating Gel Electrophoresis By Fluorescence Microscopy, Biochemistry, 29, 13, 04/03/1990, pp 3396-3401	
	HA	GURRIERI et al, Trapping Of Megabase Sized DNA Molecules During Agarose Gel Electrophoresis, PNAs USA, 96, 01/1999, pp 453-458	
	HB	HOLTZ et al, Polymerized Colloidal Crystal Hydrogel Films As Intelligent Chemical Sensing Materials, Nature, 389, 10/23/1997, pp 829-832	
	HC	HOUSEAL et al, Imaging Of The Motions & Conformational Transitions Of Single DNA Molecules Using Fluorescence Microscopy, Biophys. J., 55, 324, 02/12/1989, pp 373a	
	HD	HOUSEAL et al, Real Time Imaging Of Single DNA Molecules With Fluorescence Microscopy, Biophys. J., 56, 09/1989, pp 507-516	
	HE	HUBER et al, Isolation Of A Hyperthermophilic Archaeum Predicted By in situ RNA Analysis, Nature, 376, 6535, 07/06/1995, pp 57-58	
	HF	INSIDE R&D, Matter Bound By Light, Inside R&D, 18, 43, 10/25/1989, pp 2	
		KUO et al, Optical Tweezers In Cell Biology, Trends In Cell Biology, 2, 04/1992, pp 116-118	
		LAI, Determination Of Spring Constant Of Laser Trapped Particle By Self-Mixing Interferometry, Proc.of SPIE, 3921, 2000, pp 197-204	
	HI	LAW, Matter Rides On Ripples of Lights, New Scientist, 1691, 11/18/1989, pp 1691	
	HJ	LEGER et al, Coherent Laser Addition Using Binary Phase Gratings, Applied Optics, 26,20, 10/15/1987, pp 4391-4399	
	HK	MAMMEN et al, Optically Controlled Collisions Of Biological Objects To Evaluate Potent Polyvalent Inhibitors Of Virus-Cell Adhesion, Chemistry & Biology, 3, 9, 09/1996, pp 757-763	
	HL	MASON et al, Optical Measurements Of Frequency Dependent Linear Viscoelastic Moduli Of Complex Fluids, Physical Review Letters, 74,7, 02/13/1995, pp 1250-1253	
	HM	MCCLELLAND et al, Low Frequency Peculiarities Of The Photorefractive Response In Sillenites, Optics Communications, 113, 01/01/95, pp 371-377	
	HN	MISAWA et al, Spatial Pattern Formation, Size Selection, & Directional Flow Of Polymer Latex Particles By Laser Trapping Technique, Chemistry Letters, 3, 03/1991, pp 469-472	
	HO	MISAWA et al, Multibeam Laser Manipulation & Fixation Of Microparticles, Appl.Phys.Lett., 60,3, 01/20/1992, pp 310-312	
	HP	MITCHELL et al, A Practical Optical Trap For Manipulating & Isolating Bacteria From Complex Microbial Communities, Microb Ecol, 25, 2, 1993, pp 113-119	
	HQ	MURRAY et al, Experimental Observation Of Two Stage Melting In A Classical Two Dimensional Screened Coulomb System, Physical Review Letters, 58,12, 03/23/1987, pp 1200-1203	
	HR	MURRAY et al, Colloidal Crystals, American Scientist, 83,3, 05-06/1995, pp 238-245	
	HS	MYCOMETRIX, Mycometrix Website printout, http://www/mycometrix.com, 12/01/2000	
	HT	NEW YORK TIMES, Atoms Bound Together By Light, New York Times, 10/31/1989, pp C17	
	HU	PATERSON et al, Controlled Rotation Of Optically Trapped Microscopic Particles, Science, 292, 05/04/2001, pp 912-914	
	HV	PRITCHARD et al, Light Traps Using Spontaneous Forces, Physical Review Letters, 57,3, 07/21/1986, pp 310-313	

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
<i>[Signature]</i>	HW	QUAKE et al, From Micro- To Nanofabrication With Soft Materials, Science, 290, 11/24/2000, pp 1536-1540	
<i>[Signature]</i>	HX	RAAB et al, Trapping Of Neutral Sodium Atoms With Radiation Pressure, Physical Review Letters, 59,23, 12/07/1987, pp 2631-2634	
<i>[Signature]</i>	HY	ROGOVIN et al, Bifurcation In Degenerate Four-Wave Mixing In Liquid Suspensions Of Microspheres, Physical Review Letters, 54,20, 05/20/1985, pp 2222-2225	
<i>[Signature]</i>	HZ	ROOSEN, A Theoretical & Experimental Study Of The Stable Equilibrium Positions Of Spheres Levitated By Two Horizontal Laser Beams, Optics Communications, 21, 1, 04/1977, pp 189-194	
<i>[Signature]</i>	IA	SASAKI et al, Laser Scanning Micromanipulation & Spatial Patterning Of Fine Particles, Japn Jnl Of Applied Physics, 31,5B, 05/1991, pp L907-L909	
<i>[Signature]</i>	IB	SASAKI et al, Pattern Formation & Flow Control Of Fine Particles By Laser Scanning Micromanipulation, Optics Letters, 16,19, 10/01/1991, pp 1463-1465	
<i>[Signature]</i>	IC	SASAKI et al, Optical Micromanipulation Of A Lasing Polymer Particle In Water, Jpn.J.Appl.Phys., Pt2, 32, 8B, 08/15/1993, pp L1144-1147	
<i>[Signature]</i>	ID	SMITH et al, Four-wave Mixing In An Artificial Kerr Medium, Optics Letters, 6, 6, 06/1981, pp 284-286	
<i>[Signature]</i>	IE	SMITH et al, Direct Mechanical Measurements Of The Elasticity Of Single DNA Molecules By Using Magnetic Beads, Science, 258, 5085, 11/13/1992, pp 1122-1126	
<i>[Signature]</i>	IF	SMITH et al, Model & Computer Simulations Of the Motion Of DNA Molecules During Pulse Field Gel Electrophoresis, Biochemistry, 30, 21, 05/28/1991, pp 5264-5274	
<i>[Signature]</i>	IG	SUZUKI et al, Hysteretic Behavior & Irreversibility Of Polymer Gels By pH Change, J.Chem.Phys., 103, 11, 09/15/1995, pp 4706-4710	
<i>[Signature]</i>	IH	SUZUKI et al, Optical Switching In Polymer Gels, J.Appl.Phys., 80,1, 07/01/1996, pp 131-136	
<i>[Signature]</i>	II	SVOBODA et al, Biological Applications Of Optical Forces, Annu.Rev.Biophys.Biomol.Struct., 23, 1994, pp 247-285	
<i>[Signature]</i>	IJ	SVOBODA et al, Conformation & Elasticity Of The Isolated Red Blood Cell Membrane Skeleton, Biophys.J., 63, 3, 09/01/1992, pp 784-793	
<i>[Signature]</i>	IK	SWANSON et al, Diffractive Optical Elements For use In Infrared Systems, Optical Engineering, 28,6, 06/1989, pp 605-608	
<i>[Signature]</i>	IL	TAKASHIMA et al, Dielectric Dispersion Of DNA, J.Mol.Biol., 7, 5, 11/1963, pp 455-467	
<i>[Signature]</i>	IM	THIRUNAMACHANDRAN, Intramolecular Interactions In The Presence of An Intense Radiation Field, Molecular Physics, 40,2, 1980, pp 393-399	
<i>[Signature]</i>	IN	UNGER et al, Monolithic Microfabricated Valves & Pumps By Multilayer Soft Lithography, Science, 288, 04/07/2000, pp 113-116	
<i>[Signature]</i>	IO	VAN BLAADEREN et al, Template Directed Colloidal Crystallization, Nature, 385, 6614, 01/23/1997, pp 321-324	
<i>[Signature]</i>	IP	VISSCHER et al, Construction Of Multiple Beam Optical Traps With Nanometer Resolution Position Screening, IEEE Jnl Of Selected Topics In Quantum Electronics, 2,4, 12/1996, pp 1066-1075	
<i>[Signature]</i>	IQ	WEBER et al, Manipulation Of Cells, Organelles & Genomes By Laser Microbeam & Optical Trap, Intl Rev Of Cytology, 133, 1992, pp 1-41	
<i>[Signature]</i>	IR	WESTBROOK et al, Localization Of Atoms In A Three Dimensional Standing Wave, Physical Review Letters, 65,1, 07/02/1990, pp 33-36	
<i>[Signature]</i>	IS	WHEELER, Force Fields Of Laser Light Bind Molecules in A Remarkable Discovery At Harvard, The Chronicle Of Higher Education, 10/25/1989, pp A4	
<i>[Signature]</i>	IT	WRIGHT et al, Radiation Trapping Forces On Microspheres With Optical Tweezers, Appl.Phys.Lett., 63, 6, 08/09/1993, pp 715-717	

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CD	IW	YABLONOVITCH et al, Inhibited Spontaneous Emission In Solid State Physics & Electronics, Physical Review Letters, 58,20, 05/18/1987, pp 2059-2062	
OS	IX	YABLONOVITCH et al, Photonic Band Structure: The Face Centered Cubic Face, Physical Review Letters, 63,18, 10/30/1989, pp 1950-1953	
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